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Anchors away

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QUESTION: A 47-year-old man comes to the office because of a new non-pruritic, non-painful dark patch that developed under his right arm during the past four months. The patient has no other dermatologic conditions or personal or family history of skin cancer, is unmarried, and denies any HIV risk factors.

On physical exam, a pigmented area is seen posterior to the right axilla (Figures 1 and 2). Although the pigmented area has the shape of an anchor, the patient denies having any tattoos or service in the Navy.

What is the differential diagnosis for this lesion and how would you proceed with making this diagnosis?

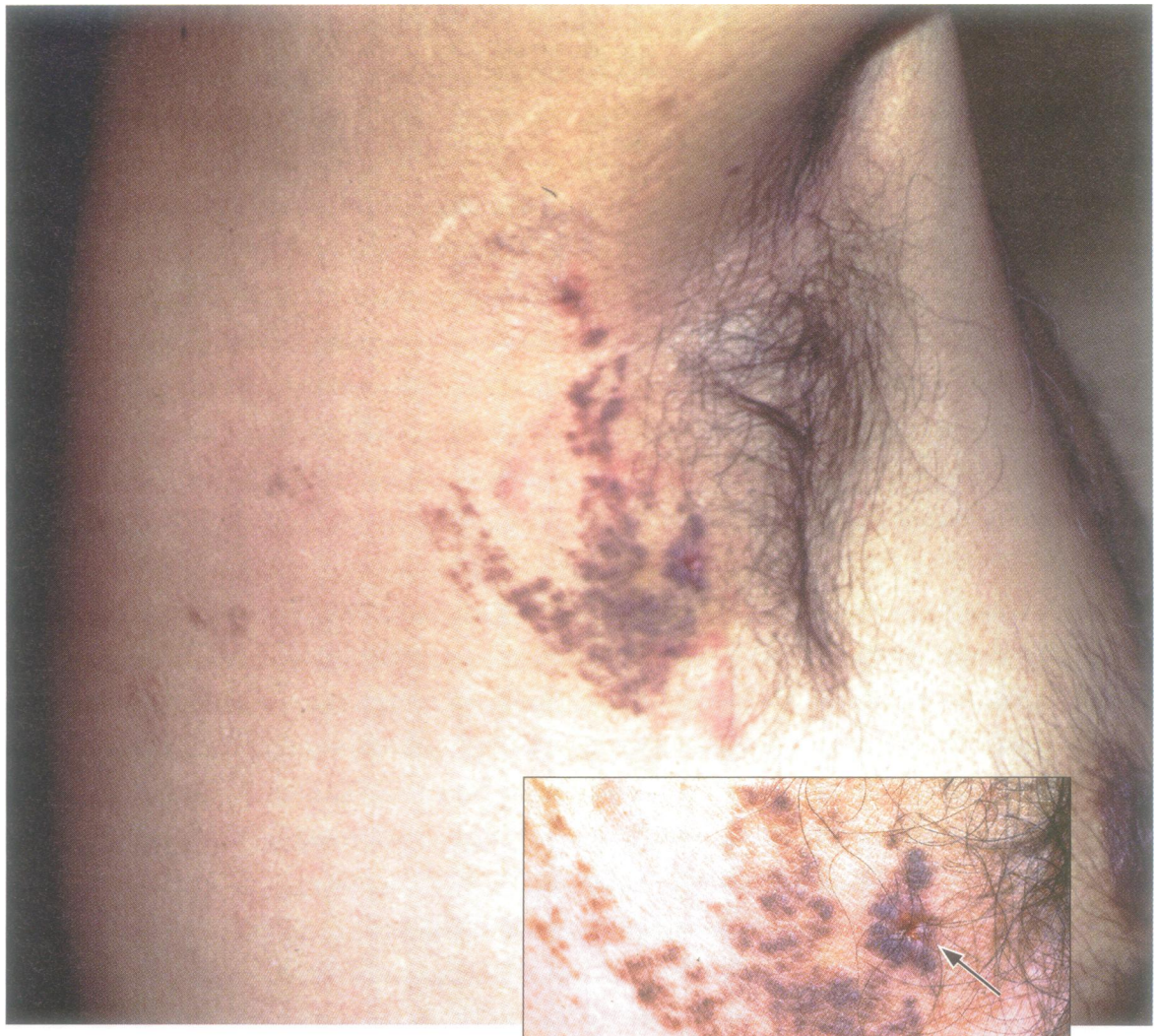

Figure 1 *Pigmented lesion. Printed with permission from Skin Surgery: A Practical Guide. Mosby-Year Book, Inc., St. Louis, 1998.*

Figure 2 *Close-up.*

ANSWER: The differential diagnosis for this lesion includes melanoma, acanthosis nigricans, lentigo maligna, solar lentigo, and postinflammatory hyperpigmentation. A full-thickness biopsy is indicated to rule out melanoma and make the diagnosis. If it turns out to be a melanoma, this full-thickness biopsy specimen is useful to measure the depth and stage of the cancer. Because the lesion is very large, a histologic diagnosis is required before considering a complete excision.

A 4-mm punch biopsy in the most suspicious area (darkest and most elevated) was performed (a small incisional biopsy would also work). The site where the 4-mm punch biopsy was performed is indicated by the arrow in Figure 2 in the lower right portion of the pigmented lesion.

The histologic diagnosis revealed melanoma Clark's level I with a total thickness of less than 0.76 mm. The remainder of the lesion was excised in the operating room and closed with sutures. The pathology report showed acanthosis with no further melanoma detected. A dermatopathologist confirmed that the original punch biopsy truly was melanoma.

Table 1 *The recommended margins for excision of confirmed and suspected melanoma. The starred numbers are based on the National Institutes of Health (NIH) consensus panel on melanoma.*

Choosing surgical margins

Melanoma	Margin during excision
Confirmed melanoma in situ (lentigo maligna)	5 mm*
Confirmed level <1 mm	10 mm*
Confirmed level 1-2 mm	20 mm
Confirmed level >2 mm	at least 20 mm
Moderate to high suspicion	1 mm
Very low suspicion	1 mm or shave

*NIH Consensus Conference. Diagnosis and treatment of early melanoma. JAMA 1992;268:1314–1319. Table adapted from Usatine R, Noy R, Tobinick E, et al. Skin surgery: A practical guide. St. Louis: Mosby-Year Book, 1998.

The patient recovered well and has remained disease-free for 10 years. Figure 3 shows the healed site with new pigment returning. Biopsy of the new pigment showed acanthosis nigricans only and no return of the melanoma.

Lessons from this case:

- Any new pigmented lesion could be a melanoma.

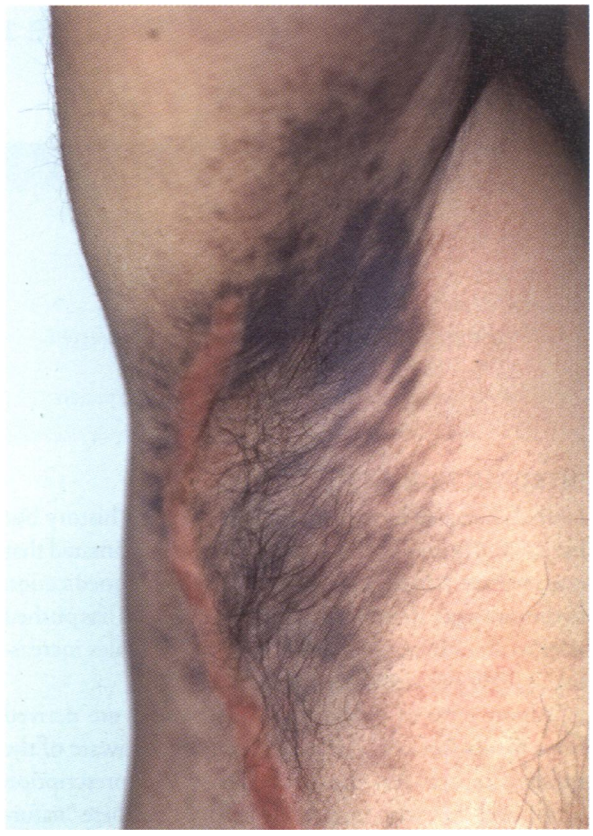

Figure 3 *Acanthosis nigricans developed a few months after surgery.*

- When one suspects melanoma, a full-thickness biopsy is preferred to stage the disease.
- When the lesion is large, a punch biopsy in the most suspicious area may yield the diagnosis.
- A punch biopsy or incomplete excision of a melanoma does not spread the melanoma to other parts of the body.[1,2]
- A single negative punch biopsy in a large suspicious lesion is best followed by additional punch biopsies or a larger excisional biopsy to rule out a false-negative result.

References

1 Landthaler M, Braun-Falco O, Leitl A, et al. Excisional biopsy as the first therapeutic procedure versus primary wide excision of malignant melanoma. Cancer 1989 Oct 15;64(8):1612-1616.

2 Lederman JS, Sober AJ. Does biopsy type influence survival in clinical stage I cutaneous melanoma? J Am Acad of Dermatol 1985 Dec 13;(6):983-987.